

Title (en)

Maintaining consistency of cached data in a database system.

Title (de)

Bewahren der Konsistenz von Cachedaten in einem Datenbanksystem.

Title (fr)

Maintenir la cohérence de données d'antémémoire dans une base de données.

Publication

EP 0471282 A2 19920219 (EN)

Application

EP 91113284 A 19910808

Priority

US 56673290 A 19900813

Abstract (en)

A method of maintaining the consistency of cached data in a client-server database system. Three new locks--a cache lock, a pending lock and an out-of-date lock--are added to a two-lock concurrency control system. A new long-running envelope transaction (69) holds a cache lock (45) on each object cached by a given client. A working transaction of the client works only with the cached object until commit time. If a second client's working transaction acquires an "X" lock on the object (167) the cache lock is changed to a pending lock (51); if the transaction thereafter commits (171) the pending lock is changed to an out-of-date lock (47). If the first client's working transaction thereafter attempts to commit, it waits for a pending lock to change (67); it aborts if it encounters an out-of-date lock (49); and otherwise it commits (61). <IMAGE>

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IPC 8 full level

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Cited by

US5940827A; EP1408408A1; GB2269920A; CN107341624A; CN109976920A; EP0735473A3; GB2394816A; GB2394816B; KR20030035122A; EP1162538A3; EP1162539A3; EP1176510A3; US7127460B2; US7200623B2; US7930278B2; WO0133472A3; WO9938096A1; US6850938B1; US8745707B2; US8239219B2; US8560356B2; US6633891B1; US6560601B1; US8543432B2; US6507853B2; US6564230B2; US6564234B2; US6567827B2; US6609136B2; US7577690B2; US7065540B2; US7296039B2

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